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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,677	01/27/2004	Naoyuki Nishikawa	B422-251	3038

26272 7590 09/19/2008
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NEW YORK, NY 10036

EXAMINER

NGUYEN, ALLEN H

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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09/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/766,677	Applicant(s) NISHIKAWA, NAOYUKI	
	Examiner ALLEN H. NGUYEN	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/18/2008 has been entered. Currently, claims 1-9 are pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Arguments

3. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. (US 5,799,206) in view of Kadota (US 2003/0076519).

Regarding claim 1, Kitagawa '206 discloses a remote printing server (Network NPR 120, fig. 1) which receives data from a client computer (Host Computer 110, fig. 1) and sends data over a network (Network 100, fig. 1) so as to print the data on a remote printer (The NPR 120 is a printer which receives the print job from the network 100 to execute printing, col. 1, lines 45-50), comprising:

print response means (NPR Connecting Protocol Controlling Unit 121, fig. 1) for performing a print control protocol so that the client computer can recognize said remote printing server as the remote printer (i.e., NPR 120 includes a NPR connecting protocol controlling unit 121 for conducting communication necessary to control the operation of the NPR 120; Col. 9, lines 15-20), receiving print data from the client computer and generating a print job for performing a response process when the data is printed (i.e., The NPR connecting protocol controlling unit 121 interprets the protocol command received from the network 100, controls the drawing/printing unit 122 to cause it to execute printing, and sends a status indicative of a result of the processing to the NPR control daemon 115; Col. 10, lines 24-28);

spooling means (a spool, col. 2, line 10) for generating a print completion job by spooling print job generated by said print response means (i.e., a spool may be provided in the NPR 120 and the print job receiving process 1701 may queue the print

Art Unit: 2625

job in the spool, so that the print process 1702 can start printing when the print job is present in the spool; Col. 2, lines 10-15, fig. 17);

remote transfer means (Socket 116 / TCP/IP 117, fig. 1) for transferring the print completion job converted into a transferrable format by said transferring data conversion means using a predetermined transfer protocol (i.e., the print job receiving process 1701 utilizes the TCP/IP 117 through the socket 116 to receive a print job from the network 100 in accordance with the protocol for print job transfer and transfers the print job to the print process 1702; Col. 2, lines 1-5, fig. 17).

Kitagawa '206 does not explicitly show transferring data conversion means for converting the print completion job generated by said spooling means into a format in which the job can be transferred to the remote printer over the network.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Kadota '519. In particular, Kadota '519 teaches transferring data conversion means (GDI Printer Driver 25, fig. 1) for converting the print completion job generated by said spooling means (spool file modifying module 23, fig. 1) into a format in which the job can be transferred to the remote printer over the network (i.e., the EMF returned to the spool area 28 and corresponding to a new print job is transferred to the GDI 25 by the print processor 27. Then, the GDI 25 converts the transferred EMF, which corresponds to the new print job into printer control codes suitable to the printer 3; Page 5, paragraph [0072], fig. 1).

In view of the above, having the system of Kitagawa and then given the well-established teaching of Kadota, it would have been obvious to one having ordinary skill

Art Unit: 2625

in the art at the time of the invention was made to modify the system of Kitagawa as taught by Kadota to include: transferring data conversion means for converting the print completion job generated by said spooling means into a format in which the job can be transferred to the remote printer over the network, since Kadota stated on page 1, paragraph [0002] that such a modification would ensure a network printing system has been known and widely employed.

Regarding claim 2, Kitagawa '206 discloses the remote printing server (Network NPR 120, fig. 1), further comprising:

Recovery means (Print process 1702, fig. 17) for performing a recovery process on the print completion job transferred by said remote transfer means as necessary (i.e., the print process 112 can assist in automatic recovery without informing the user of the error; Col. 21, lines 14-20, fig. 17).

Regarding claim 3, Kitagawa '206 discloses the remote priming server (Network NPR 120, fig. 1), further comprising:

selection means (a transmission control protocol/internet protocol(TCP/IP) 117, and a socket interface 116, fig. 1) for selecting a transfer protocol for remote transfer of the data (i.e., a transmission control protocol/internet protocol(TCP/IP) 117, and a socket interface 116 through which the print job sending process 1703 utilizes the TCP/IP to perform communication; Col. 1, lines 40-45, fig. 17).

Art Unit: 2625

Regarding claim 6, Kitagawa '206 discloses the remote printing server (Network NPR 120, fig. 1), further comprising:

transfer control means (Network 100, fig. 1) for controlling a transfer parameter setting file and said remote transfer means by referring to the transfer parameter setting file (i.e., the NPR 120 sends a GOOD status 616 to the NPR controlling daemon 115. Receiving the GOOD status 616, the NPR controlling unit 214 sends a RNPCANCEL message 617 to the npctl function. The npctl function returns a result of the processing to the print process 112 by referring to a function value and a parameter (618); Col. 18, lines 61-67, fig. 6).

Regarding claim 7, Kitagawa '206 discloses a remote print system (Fig. 1), comprising:

the remote printing and the remote printer (i.e., in a remote print system and a computer used therein according to another feature of the present invention, the remote print system is made up of a network, a plurality of computers connected to the network to communicate with each other and a plurality of printers connected to the network, wherein at least one of the plurality of computers causes at least one of the plurality of printers to execute printing; Col. 4, lines 65-67 and Col. 5, lines 1-5, fig. 1).

Kitagawa '206 does not explicitly show the remote printing server.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Kadota '519. In particular, Kadota '519 teaches the remote printing server

Art Unit: 2625

(i.e., the server PC 2 using an RPC such as Remote Procedure Call; Page 4, paragraph [0065]).

In view of the above, having the system of Kitagawa and then given the well-established teaching of Kadota, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Kitagawa as taught by Kadota to include: the remote printing server, since Kadota stated on page 1, paragraph [0002] that such a modification would ensure a network printing system has been known and widely employed. A network system typically includes a plurality of personal computers interconnected through a network, and a printer connected to one of the interconnected PCs. The printer functions as a shared printer which can be used by any PC connected with the network.

Regarding claim 8, claim 8 is the method claim of device claim 1. Therefore, method claim 8 is rejected for the reason given in device claim 1.

Regarding claim 9, Kitagawa '206 discloses a computer-readable storage medium storing a program used to direct a computer to use as a remote printing server for receiving data from a client computer (110, fig. 1) and for sending data over a network so as to print the data on a remote printer (i.e., the NPR 120 is a printer which receives a command for control and data from the network 100 to execute printing. The NPR 120 includes a NPR connecting protocol controlling unit 121 for conducting

Art Unit: 2625

communication necessary to control the operation of the NPR 120; Col. 9, lines 15-20), comprising:

a print response step (the daemon 115 ends the requested processing in accordance with the command message, it transmits a response message to the print process 112, col. 9, lines 64-67, fig. 21) of performing a print control protocol so that the client computer can recognize said remote printing server as the remote printer (i.e., NPR 120 includes a NPR connecting protocol controlling unit 121 for conducting communication necessary to control the operation of the NPR 120; Col. 9, lines 15-20), receiving print data from the client computer and generating a print job for performing a response process when the data is printed (i.e., The NPR connecting protocol controlling unit 121 interprets the protocol command received from the network 100, controls the drawing/printing unit 122 to cause it to execute printing, and sends a status indicative of a result of the processing to the NPR control daemon 115; Col. 10, lines 24-28);

a spooling step (a spool, col. 2, line 10) of generating a print completion job by spooling print job generated in said print response step (i.e., a spool may be provided in the NPR 120 and the print job receiving process 1701 may queue the print job in the spool, so that the print process 1702 can start printing when the print job is present in the spool; Col. 2, lines 10-15, fig. 17);

a remote transfer step (Socket 116 / TCP/IP 117, fig. 1) of transferring the print completion job converted into a transferrable format in said transferring data conversion step using a predetermined transfer protocol (i.e., the print job receiving process 1701

Art Unit: 2625

utilizes the TCP/IP 117 through the socket 116 to receive a print job from the network 100 in accordance with the protocol for print job transfer and transfers the print job to the print process 1702; Col. 2, lines 1-5, fig. 17).

Kitagawa '206 does not explicitly show a transferring data conversion step of converting the print completion job generated in said spooling step into a format in which the job can be transferred to the remote printer over the network.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Kadota '519. In particular, Kadota '519 teaches a transferring data conversion step (GDI Printer Driver 25, fig. 1) of converting the print completion job generated in said spooling step into a format in which the job can be transferred to the remote printer over the network (i.e., the EMF returned to the spool area 28 and corresponding to a new print job is transferred to the GDI 25 by the print processor 27. Then, the GDI 25 converts the transferred EMF, which corresponds to the new print job into printer control codes suitable to the printer 3; Page 5, paragraph [0072], fig. 1).

In view of the above, having the system of Kitagawa and then given the well-established teaching of Kadota, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Kitagawa as taught by Kadota to include: a transferring data conversion step of converting the print completion job generated in said spooling step into a format in which the job can be transferred to the remote printer over the network, since Kadota stated on page 1, paragraph [0002] that such a modification would ensure a network printing system has been known and widely employed.

Art Unit: 2625

. 6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. (US 5,799,206) in view of Kadota (US 2003/0076519), and further in view of Qiao (US 2003/0030843).

Regarding claim 4, the combination of Kitagawa '206 and Kadota '519 does not explicitly show the remote priming server, wherein said remote transfer means uses a file transfer protocol or a mail distribution protocol.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Qiao '843. In particular, Qiao '843 teaches the remote priming server (ExPM server 12, fig. 16), wherein said remote transfer means uses a file transfer protocol (Converts the job sent from the ExPM client 2-1 by IPP into the protocol such as HTTP/FTP and transfers it to the ExPM server 31, see page 9, paragraph [0241]) or a mail distribution protocol (i.e., the ExPM client 2-1 sends the printing command mail to the target printer using Simple Mail Transfer Protocol SMTP; see page 4, paragraph [0100]).

In view of the above, having the system of Kitagawa and Kadota and then given the well-established teaching of Qiao, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Kitagawa and Kadota as taught by Qiao to include: the remote priming server, wherein said remote transfer means uses a file transfer protocol or a mail distribution protocol, since Qiao '843 stated on page 1, paragraph [0019] that such a modification would ensure a step of converting the printing service request of the client using the Internet

Art Unit: 2625

Printing Protocol to a protocol which allows circumventing the firewall of the print server, and transferring the request to the print server according to the access.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. (US 5,799,206) in view of Kadota (US 2003/0076519), and further in view of Ogishima (US 2002/0083001).

Regarding claim 5, the combination of Kitagawa '206 and Kadota '519 does not explicitly show the remote printing server, further comprising: encipher means for enciphering the print completion job transferred by said remote transfer means.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Ogishima '001. In particular, Ogishima '001 teaches the remote printing server (12, fig. 3), further comprising: encipher means for enciphering the print completion job transferred by said remote transfer means (i.e., a transmitting step enciphering requested data in the server and transmitting enciphered data via a network, a deciphering step receiving and deciphering the enciphered data in an apparatus which at least has a printing function; see page 2, paragraph [0019], fig. 3).

In view of the above, having the system of Kitagawa and Kadota and then given the well-established teaching of Ogishima, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Kitagawa and Kadota as taught by Ogishima to include: The remote printing server, further comprising: encipher means for enciphering the print completion job transferred

Art Unit: 2625

by said remote transfer means, since Ogishima stated on page 1, paragraph [0007] that such a modification would ensure various enciphering systems have been proposed to prevent copying of the digital data, by enciphering the digital data before transmission at the transmitting end and deciphering the enciphered digital data at the receiving end.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gassho et al. (US 7,054,020) discloses print job management system.

Reilly (US 6,401,150) discloses centralized queue in network printing systems.

Lawrence (US 6,665,724) discloses method for automatically delaying initialization of a protocol stack within a network interface.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALLEN H. NGUYEN whose telephone number is (571)270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571)-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

/Allen H Nguyen/
Examiner, Art Unit 2625